**JUSTIFYING VACCINE ALLOCATION TO POPULATIONS WITH HIGH CONTACT RATES**

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EXECUTIVE SUMMARY:

CONTEXT.

* The COVID-19 pandemic has caused \_\_\_ deaths and \_\_\_ hospitalizations in the United States as of 19 Feb 2021.
* COVID-19 mortality and severe disease have been concentrated mainly in elderly and minority populations.
* Two COVID-19 vaccines have been authorized for emergency use in the United States.
* According to a recent mathematical modeling study, the optimal mortality-minimizing vaccination strategy is to prioritize vaccination for those at highest risk of severe disease.1
* In practice, this has led policymakers to prioritize vaccine doses by age because:
  + the risk of severe disease increases sharply with age, and
  + insufficient data exist to inform disease transmission models based on other social and demographic factors.
* However, due to differences in life expectancy between racial/ethnic groups, age-based vaccine prioritization has contributed to racial/ethnic disparities in vaccination rates.
* Furthermore, members of racial/ethnic minority groups disproportionately hold essential jobs that require frequent interpersonal contacts, raising their risk of both acquiring and transmitting SARS-CoV-2. This underscores the potential value of prioritizing these populations for vaccination.
* Vaccine uptake among 75+ year-olds has reached \_\_% in the United States, thereby protecting many of the most vulnerable individuals. It is now an urgent priority to consider whom to vaccinate next.
* This choice should be informed by a wide range of considerations including justice, reciprocity, and anticipated epidemiological outcomes.
* This report considers the epidemiological angle.

APPROACH.

* We developed a mathematical model that...

REFERENCES

1. Bubar KM, Reinholt K, Kissler SM, Lipsitch M, Cobey S, Grad YH, et al. Model-informed COVID-19 vaccine prioritization strategies by age and serostatus. *Science (80- )*. Published online January 21, 2021:eabe6959. doi:10.1126/science.abe6959